Claims

1. A method for regulating a tension (S0, S1) of a web (01) passing through a processing machine, wherein interferences occurring during processing and affecting the tension (S0, S1) are compensated by means of a regulating device (22) and the tension (S0, S1) is maintained at a reference variable (S0-soll, S1-soll) or within a permissible range, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are reduced, at least temporarily, in respect to an actually existing reference variable (S0-soll, S1-soll).

- 2. A method for regulating a tension (S0, S1) of a web (01) passing through a processing machine, characterized in that an interference affecting the tension (S0, S1) during the production is counteracted in that a reference variable (S0-soll, S1-soll) of the tension (S0, S1) is changed.
- 3. The method in accordance with claim 1 or 2, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are reduced to a fixed value (S0-fix).
- 4. The method in accordance with claim 1 or 2, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are reduced by a predetermined amount (Delta S-soll) in respect to the actually existing reference variable (S0-soll, S1-soll).

5. The method in accordance with claim 1 or 2, characterized in that the change or reduction of the reference value (S0-soll, S1-soll) takes place in one step substantially without a chronological extension.

- 6. The method in accordance with claim 1 or 2, characterized in that the change or reduction of the reference value (S0-soll, S1-soll) takes place on the basis of a predetermined function, depending on the time.
- 7. The method in accordance with claim 6, characterized in that the change or reduction of the reference variable (S0-soll, S1-soll) takes place discontinuously in time intervals.
- 8. The method in accordance with claim 2, characterized in that during the production the tension (S0, S1) is maintained at a reference variable (S0-soll, S1-soll), or within a permissible range.
- 9. The method in accordance with claim 1 or 2, characterized in that the change of the reference variable (S0-soll, S1-soll) takes place in the run-up to or during the interference.
- 10. The method in accordance with claim 1 or 2, characterized in that the change of the reference variable (S0-soll, S1-soll) takes place for the compensation of an interference caused by a roll change.

11. The method in accordance with claim 1 or 2, characterized in that the change of the reference variable (S0-soll, S1-soll) takes place for the compensation of an interference in the form of a connection (26) of a fresh with an old web (01).

- 12. The method in accordance with claim 4, characterized in that the change by the predetermined amount (Delta S-soll) takes place in such a way that it counteracts the expected change in the tension (S0, S1).
- 13. The method in accordance with claim 1 or 2, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1) is altered upstream of a first printing unit (16) located in the transport direction (T) of the web (01).
- 14. The method in accordance with claim 13, characterized in that the change of the reference variable (S0-soll, S1-soll) is made at the draw-in unit (03).
- 15. The method in accordance with claim 13, characterized in that the change in the reference variable (S0-soll, S1-soll) takes place at the latest during a connection of an old web (01) with a fresh web (01).
- 16. The method in accordance with claim 13, characterized in that the change in the reference variable (S0-soll, S1-soll) takes place at the latest during the passage of the connection (26) through the last clamping point upstream of a first printing unit (16) located in the transport direction (T) of the web (01).

17. The method in accordance with claim 1 or 2, characterized in that following the change, or reduction of the reference variable (S0-soll, S1-soll), the latter is maintained constant at the new level for a predeterminable time interval (Delta t1).

- 18. The method in accordance with claim 17, characterized in that after the time interval (Delta t1), the reference variable (S0-soll, S1-soll) is returned to its original constant value for stationary operation.
- 19. The method in accordance with claim 17, characterized in that after the time interval (Delta t1), the reference variable (S0-soll, S1-soll) is returned to a new constant value differing from the original reference variable (S0-soll, S1-soll) for stationary operation.
- 20. The method in accordance with claim 18 or 19, characterized in that the return of the reference variable (S0-soll, S1-soll) takes place by means of a predetermined function, depending on the time.
- 21. The method in accordance with claim 18 or 19, characterized in that the return of the reference variable (S0-soll, S1-soll) takes place using measured values of the tensions (S0-ist, S1-ist).
- 22. The method in accordance with claim 20 or 21, characterized in that the return of the reference variable (S0-

soll, S1-soll) takes place discontinuously in time intervals (Delta t_m).

- 23. The method in accordance with claim 20 or 21, characterized in that the return of the reference variable (S0-soll, S1-soll) takes place continuously by means of at least one sectionally defined chronological connection.
- 24. A method for regulating a tension (S0, S1) of a web (01) passing through a processing machine with a regulating device (22), by means of which during processing the tension (S0, S1) is maintained at a reference variable (S0-soll, S1-soll) or in a permissible range, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are temporarily changed in respect to an actually existing reference variable (S0-soll, S1-soll) in order to counteract an interference.
- 25. The method in accordance with claim 24, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are temporarily reduced to a fixed value (S0-fix).
- 26. The method in accordance with claim 24, characterized in that the reference variable (S0-soll, S1-soll) of the tension (S0, S1), or the permissible range, are temporarily reduced by a predeterminable value (Delta S-soll) in respect to the actually existing reference variable (S0-soll, S1-soll).

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- 27. The method in accordance with claim 25 or 26, characterized in that a memory unit (23) is provided, in which at least one value of the amount (Delta S-soll) of the change of the reference variable (S0-soll, S1-soll), or the fixed value (S0-fix), is stored.
- 28. The method in accordance with claim 26, characterized in that a memory or computing unit (23) is provided, in which at least one correlation for determining a value (Delta S-soll) of the change of the reference variable (S0-soll, S1-soll) is stored.